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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,637	07/13/2006	Guimo Yang	12466/12 (PTG-1145-PCN-WO)	1928
757 7590 01/31/2008 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER TALBOT, MICHAEL	
			ART UNIT 3722	PAPER NUMBER
			MAIL DATE 01/31/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,637

Applicant(s)

YANG ET AL.

Examiner

Michael W. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/23/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to because "the details of the nut (3), the nut sleeve (5), the rotational sleeve (8), the gear wheel (11) and the spacer (10) as shown in Figs. 1 and 2 regarding their inter-connection and operational functionality between the individual parts is unclear due to the shading and finite representation of the individual elements. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section

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that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamaki et al. (US6,659,474) in view of Rohm (US 6,581,942). Sakamaki et al. '474 shows in Figures 1-5 a self-locking drill chuck comprising a generally cylindrical body (2) defining an axis, a forward portion, a rearward portion, and a plurality of inclined holes (2a) extending obliquely to the axis and converging toward the front portion, a plurality of jaws (3) corresponding to the plurality of holes being slidably disposed within a respective hole and including a thread section (3a) along an outer surface, a nut (6) rotatable about the body and configured to engage the thread section of the jaw, a gear wheel (5) fixed to a portion of the chuck body axially forward of the nut and having a plurality of spaced teeth about a periphery of the gear wheel, a nut sleeve (7,8,11) fixed to the nut having a forward portion and a rearward portion and including at least one pawl (7a,7b,11c,11d) extending from the rearward portion, a front sleeve (1) surrounding at least a portion of the body, and a rotational sleeve (9) annularly disposed between the front sleeve and the nut sleeve, and including at least one protruding stopper (9a,9b,9c,9d), wherein the rotational sleeve is in a first position at least one portion of the at least one pawl engages at least a portion of the gear wheel between adjacent teeth (Figs. 2-4). Sakamaki et al. '474 further shows the nut sleeve including two pawls having a slightly convex, v-shaped bend. Sakamaki et

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al. '474 lacks the placement of the gear wheel being fixed to a portion of the chuck body axially rearward of the nut.

Rohm '942 shows in Figures 1,5-7,9,11,12,23 and 25 a self-locking drill chuck comprising a generally cylindrical body (1) defining an axis (3), a forward portion, a rearward portion, and a plurality of inclined holes (23) extending obliquely to the axis and converging toward the front portion, a plurality of jaws (5) corresponding to the plurality of holes being slidably disposed within a respective hole and including a thread section (6) along an outer surface, a nut (8) rotatable about the body and configured to engage (via 7) the thread section of the jaw, and a gear wheel (10,21) fixed to a portion of the chuck body axially rearward of the nut (Figs. 5-7,23 and 25) or fixed to a portion of the chuck body axially forward of the nut (Figs. 1,9,11 and 12). In view of this teaching of Rohm '942, it would have been obvious to one of ordinary skill in the art to modify the drill chuck of Sakamaki et al. '474 to include the gear wheel fixed to the chuck body axially rearward of the nut as taught by Rohm '942 to provide for alternate construction/assembly details contingent upon one's design criteria since "placement of the gear wheel axially rearward and/or forward of the nut" are both well-known to one of ordinary skill in the art.

Furthermore, Applicant does not provide any criticality or unexpected results for "the placement of the gear wheel being fixed to a portion of the chuck body axially rearward of the nut" as recited in claim 1.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's

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office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MWT
Examiner
28 January 2008

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER